

REMARKS

The Office Action dated October 1, 2008 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1, 3-19, 21-26 and 34 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 2, 20, 27-33, 35 and 36 have been canceled without prejudice or disclaimer. Claims 37-45 are newly added. No new matter has been added and no new issues are raised which require further consideration or search. Claims 1, 3-19, 21-26, 34 and 37-45 are presently pending.

The Office Action objected to claims 7, 23 and 34 for containing minor informalities. Applicants have amended claims 7, 23 and 24 to correct these informalities. Withdrawal of the objections is kindly requested.

Claims 25 and 26 were rejected under 35 U.S.C. §102(b) as being anticipated by Phan-Anh (WO 02/091785). The Office Action took the position that Phan-Anh discloses all of the elements of the claims. This rejection is respectfully traversed for at least the following reasons.

Claim 25, upon which claims 37 and 38 are dependent, recites an apparatus that includes a processor configured to perform various operations. The operations include to determine that a first network element in a communications network is out of service by sending a request to the first network element and determining that no response has been received from the first network element. Other operations include, when the first

network element is determined to be out of service, drop a bearer for signalling between the apparatus and a communications network comprising the first network element. Further operations include to discover or select a second network element, and to send to the second network element a message comprising an initial request for registration at the communications network.

Claim 26 recites a method that includes receiving at a user equipment a first message to a first network element. The method also includes detecting at the user equipment that the first network element is out of service. The method further includes dropping a signalling bearer from the user equipment to a communications network comprising the user equipment and the first network element. The method also includes selecting or discovering at the user equipment a second network element in the communications network. The method further includes sending from the user equipment to the second network element a message comprising an initial registration request.

As will be discussed below, the disclosure of Phan-Anh fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above. The rejection is respectfully traversed for at least the following reasons.

Phan-Anh discloses a communication system in which a user can be provided with at least one registration at a first control entity 22. The single registration follows the actions of the user by being transferred to a second control entity 23 in response to another registration made by the user to the second control entity 23 (see FIG. 2 and Abstract of Phan-Anh).

In operation, the user equipment 1 will request a registration 1 by sending a SIP REGISTER message to a proxy server entity 30. The request is forwarded to an interrogating server 31 and a subscriber database HSS 24. The interrogating server will audit the first and second control entities for the user information and will determine where the user IDs are registered. The interrogating server 31 will then request that the user be registered with the second control entity 23 and acknowledgements are also exchanged to confirm the registration process (see page 11, lines 10-30 of Phan-Anh).

The Office Action alleged that page 14, lines 16-28 discloses “when the first network element is determined to be out of service, drop a bearer for signalling between the apparatus and a communications network comprising the first network element”, as recited, in part, in independent claim 25 and similarly in independent claims 26, 43 and 45. The Office Action further noted that “therefore, the bearer established for communication with the first controller entity is inherently dropped.” Applicants disagree and submit that the operations performed by the I-CSCF entity do not include dropping a bearer either explicitly or inherently.

Referring to page 14, lines 16-28 of Phan-Anh, an example of a subscriber registering a fifth “#5 public ID” with the network is disclosed. The first four (e.g., #1 through #4) are already registered with a “first controller entity S-CSCF1.” In operation, the I-CSCF entity will ask the first controller entity S-CSCF1 if the #5 public ID may also be registered. When the I-CSCF fails to hear a response from the S-CSCF1, the I-CSCF will select a new controller entity S-CSCF2. The #5 public ID will then be

registered with the S-CSCF2 because the S-CSCF1 is deemed unavailable. As for the first four IDS (e.g., #1 through #4), those IDS will continue to be registered with (e.g., #1 through #4) S-CSCF1.

Phan-Anh does not disclose that “when the first network element is determined to be out of service, drop a bearer for signalling between the apparatus and a communications network comprising the first network element”, as recited, in part, in independent claim 25 and similarly in independent claims 26, 43 and 45. A bearer is an established communication link between two network devices communicating over a communications network. The communications performed by the I-CSCF attempting to contact the S-CSCF1 via an “ask” procedure is not comparable to establishing a bearer. If no bearer has been established, then, certainly, no bearer can be removed or dropped. The efforts performed by the I-CSCF asking the S-CSCF1 to accept a new registration ID is not bearer establishment and the lack of response from the S-CSCF1 is not comparable to dropping a bearer.

Therefore, Applicants submit that Phan-Anh fails to teach all of the subject matter of independent claims 25, 26 and new claims 43 and 45. Withdrawal of the rejection of claims 25 and 26 are kindly requested.

Claims 1-15, 17, 19-24 and 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Phan-Anh (WO 02/091785) in view of 3GPP (3rd Generation Partnership Project; Technical Specification Group Service and System Aspects; Telecommunications Management; Charging Management; Charging data description for

the IP Multimedia Subsystem (Release 5) 3GPP TS 32.225 v2.0.0 (2002-09)). The Office Action took the position that Phan-Anh discloses all of the elements of the claims, with the exception of determining at the first network element the type of the first message; and in dependence on the type of the first message, sending an error message to the user equipment including an indication that the serving network element is out of service. The Office Action then cited 3GPP as allegedly curing this deficiency in Phan-Anh. This rejection is respectfully traversed for at least the following reasons.

Claim 1, upon which claims 3-18 are dependent, recites a method that includes receiving at a first network element in a communications network a first message from a user equipment. The method also includes transmitting the first message from the first network element to a serving network element, and detecting at the first network element that the serving network element is out of service. The method also includes determining at the first network element a type of the first message. The method also includes in dependence on the type of the first message, sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service. The method also includes subsequent to sending the error message to the user equipment, receiving a second message from the user equipment of a second type different from the first message type.

Claim 19 recites an apparatus that includes a processor configured to receive a first message from a user equipment. The processor is also configured to forward the first message to a serving network element. The processor is further configured to detect

that the serving network element is out of service and to determine a type of the first message. And, in dependence on the type of the first message received from the user equipment the processor is configured to send an error message to the user equipment. The processor is also configured to, subsequent to the error message being sent to the user equipment, receive a second message from the user equipment of a second type different from the first message type.

Claim 21, upon which claims 22-24 are dependent, recites an apparatus that includes a processor configured to receive an error message from a first network element in a communications network. The error message indicates that a serving network element for the apparatus is out of service. And, in response to the error message, to send a further message of a second type different from the first type to the first network element.

Claim 34 recites a system that includes a network element, and a serving network element in communication with the network element. The system also includes user equipment in communication with the network element. The network element is configured to receive a first message from the user equipment, forward the first message to the serving network element, and to detect that the serving network element is out of service. The system is further configured to determine a type of the first message, and in dependence on the type of the first message received from the user equipment, send an error message to the user equipment. The system is also configured to, subsequent to sending the error message to the user equipment, receive a second message from the user

equipment of a second type different from the first message type from the user equipment.

Applicants submit that the combination of Phan-Anh and 3GPP, taken individually or in combination, fail to disclose or suggest that “subsequent to sending the error message to the user equipment, receiving a second message from the user equipment of a second type different from the first message type”, as recited, in part, in independent claim 1 and similarly in independent claims 19, 21, 34, 39, 41, 42 and 44.

Referring to FIG. 3 of Phan-Anh, page 4 of the Office Action alleged that the “first network element”, as recited in the pending claims is comparable to the control entity P-CSCF 30 or the I-CSCF 31 of Phan-Anh. Applicants disagree and submit that the I-CSCF sends a SIP register request to the S-CSCF 23 at step 6, and the I-CSCF does not detect that the S-CSCF is “out of service” (emphasis added). Furthermore, the I-CSCF 31 does not send an error message to the user equipment at all (emphasis added). Therefore, the user equipment cannot send a second message of a second type different from the first message type in response to an error message.

In addition to the lack of an error message being sent by the I-CSCF 31, Phan-Anh teaches away from sending an error message to the user equipment. For example, Phan-Anh explicitly discloses that if a temporary failure occurs, then the I-CSCF is forced to select a new controller entity S-CSCF2 (see page 14, lines 22 to 25 of Phan-Anh). In other words, the I-CSCF 31 handles the selection of a new serving network element, and, therefore, there would be no reason for the user equipment to receive an error message.

The perspective of the user equipment is unfounded with respect to the selection of a new serving network element, and, as a result no error message needs to be sent to the user equipment.

In addition to the above-noted deficiencies of Phan-Anh, The Office Action admitted that Phan-Anh does not disclose all of the claim recitations of the claims. However, Applicants submit that 3GPP also fails to cure the deficiencies of Phan-Anh with respect to the pending claims. The Office Action referred to 3GPP, TS 32.225, v2.0.0, section 5.1.2.1.2 – “Session Unrelated Procedures” (3GPP) as allegedly disclosing certain features of the pending claims. In particular, the Office Action referred to FIG. 5.6 of 3GPP, and stated that the P-CSCF sends an SIP request to the S-CSCF. In the case of a failure, an appropriate SIP error message is returned to the P-CSCF. Applicants disagree and submit that 3GPP does not disclose detecting that the serving network element is “out of service”, as recited in the pending claims.

The P-CSCF actually receives a SIP response, even if the SIP response is an SIP error message. Therefore, FIG. 5.6 of 3GPP does not indicate any scenario that the S-CSCF is out of order. Furthermore, step 2 of FIG. 5.6 only indicates that the P-CSCF receives the SIP request or the error message. 3GPP is silent regarding the sending of an error message to the user equipment. Consequently, there is absolutely no disclosure in 3GPP of the feature of sending a second message of a second type different from the first message type from the user equipment, and doing so “in response” to receiving an error message that the user equipment is not admitted by the first network element.

Referring to the present application, certain examples of the present application disclose receiving at the first network element a second message from the user equipment of a second type different from the first message type subsequent to sending the error message to the user equipment, as recited in claims 1, 19, 21, 34, 39, 41, 42 and 44. This implies that an error is identified and additional processes are offered to select another serving call state control function. As a result, a user equipment attempting to re-register with an existing call session control function will send an initial registration message to a different call session control function upon receiving an error message. The present application offers the user equipment service without having to experience service discontinuity while offering the ability to change the user's communication requirements. Furthermore, users will not need to restart their user equipment in order to re-establish a network connection (see page 4, lines 5 to 26 of the present application).

Therefore, Applicants submit that Phan-Anh and 3GPP fail to disclose all of the subject matter of independent claims 1, 19, 21, 34, 39, 41, 42 and 44. By virtue of dependency, Phan-Anh and 3GPP also fail to disclose the subject matter of those claims dependent thereon. Withdrawal of the rejection of claims 1-15, 17, 19-24 and 34 is kindly requested.

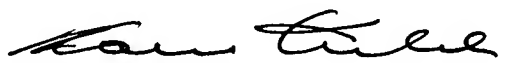
For at least the reasons discussed above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated

and unobvious. It is therefore respectfully requested that all of claims 1, 3-19, 21-26, 34 and 37-45 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Kamran Emdadi
Registration No. 58,823

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Vienna, Virginia 22182-6212
Telephone: 703-720-7800
Fax: 703-720-7802

KE:sjm

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